

COMMONWEALTH OF VIRGINIA  
STATE WATER CONTROL BOARD

FACT SHEET

REISSUANCE OF A GENERAL VPDES PERMIT  
TO DISCHARGE TO STATE WATERS AND STATE  
CERTIFICATION UNDER THE STATE WATER CONTROL LAW

The State Water Control Board (Board) has under consideration the reissuance of a general VPDES permit for point source discharges from nonmetallic mineral mining facilities.

Permit Number: VAG84

Name of Permittee: Any owner of a qualifying nonmetallic mineral mining facility with point source discharges agreeing to be regulated under the terms of this general permit.

Facility Location: Commonwealth of Virginia

Receiving Waters: Surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in Board Regulations or Policies which prohibit such discharges.

On the basis of preliminary review and application of lawful standards and regulations, the Board proposes to reissue the general permit subject to certain conditions and has prepared a draft permit. The Board has determined that this category of discharges is appropriately controlled under a general permit as it involves facilities with the same or similar types of operations that discharge the same or similar types of wastes. The draft general permit requires that all covered facilities meet standardized effluent limitations, conditions and monitoring requirements and that all covered facilities develop a site-specific storm water pollution prevention plan.

Persons may comment in writing on the proposed reissuance of the general permit within 30 days from December 1, 2003. Comments should be addressed to the contact person listed below. Comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered by the Board.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Michael B. Gregory at:

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P.O. Box 10009  
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A public hearing will be held on this draft permit. Notice of the public hearing will be published in newspapers and in the Virginia Register. Following the public hearing comment period, the Water Control Board will make its determinations regarding the proposed reissuance.

I. Activities Covered by This General Permit:

The general permit will cover point source discharges associated with nonmetallic mineral mining operations classified in Standard Industrial Classification Major Group 14. The general permit will cover storm water discharges for all qualifying facilities within this major group that have storm water discharges only, and for specific SIC Codes it will also provide coverage for process wastewater. Some of the Major Group 14 SIC codes or specific mining activities are excluded from the processing wastewater coverage because the mining activities are subject to more stringent effluent limits under EPA effluent guidelines at 40 CFR Part 436. These facilities will require a separate, individual VPDES Permit for process wastewater.

Facilities for which process wastewater is covered are those classified under SIC Codes 1411, 1422, 1423, 1429, 1442, 1455, 1459 except bentonite and magnesite mines, 1475 and 1499 except gypsum, graphite, asbestos, diatomite, jade, novaculite, wollastonite, tripoli and asphaltic mineral mining operations.

This general permit does not cover coal mining, metal mining and oil and gas extraction.

Nonmetallic mineral mines may have other industrial activities co-located within the mine permit area. These activities involve further processing of the mined material and discharges associated with them have characteristics similar to those of the mining operation. If the mineral mine is the primary industrial activity on the site and the characteristics of the wastewater from co-located industrial activities are similar to those of the mineral mine, the co-located activity discharges are also regulated under the general permit.

No mineral mine will be covered under the general permit until a mineral mining permit has been issued by the Virginia Department of Mines, Minerals, and Energy, Division of Mineral Mining (DMM). In Virginia, mining activities which disturb the land surface and remove minerals at any site are required to have a mineral mining permit under the requirements of the Minerals Other Than Coal (MOTC) Surface Mining Law, Chapter 16, Title 45.1 of the Code of Virginia. The mineral mining permits are administered by DMM. The Surface Mining Law requires that no operator shall engage in mining without having first obtained from DMM an operating permit which covers the affected land. The exception to this requirement is for mineral mines owned and operated by governmental bodies, which are not required to have a mining permit, but will be eligible for coverage under the general permit provided they comply with all other requirements. Mineral mining permits require the implementation of an erosion and sedimentation control plan as an enforceable part of the permit. The mineral mining permit application also requires the applicant to provide an acceptable mine reclamation plan that provides for adequate measures to prevent erosion and sedimentation from the reclaimed site. The mining permit and its requirements for erosion and sedimentation control are administered and enforced in such a manner as to provide protection of water quality standards and existing uses in the receiving waters from pollution caused by eroding material from mining activities. These requirements in the mineral mining permit satisfy many of the storm water pollution prevention plan requirements of the general permit.

II. Proposed Effluent Limitations and Monitoring Requirements:

A. Discharge of commingled storm water runoff and process wastewater:

<u>Parameter</u>	<u>Limitation</u>
Flow	Report average and maximum
Total Suspended Solids	30 mg/l average, 60 mg/l maximum
pH	6.0 minimum, 9.0 maximum*
TPH**	Report maximum

\* Where the Water Quality Standards establish alternate standards for pH, effluent limitations may be adjusted within the 6 to 9 range.

\*\* Monitoring for Total Petroleum Hydrocarbons is required for outfalls from vehicle/equipment washing facilities or from discharges that pass through oil/water separators.

Monitoring and reporting of grab sample analysis results are required once per three months.

B. Discharge of storm water which does not combine with other wastewater:

<u>Parameter</u>	<u>Monitoring Requirement</u>
Flow	Report volume discharged during monitored storm event
Total Suspended Solids	Report maximum
pH	Report minimum and maximum

Monitoring and reporting of grab sample analysis results are required once per year for storm event samples collected during the first 30 minutes of a discharge.

III. Basis for Proposed Effluent Limits and Monitoring Requirements, Commingled Wastewater:

Mining area wastewaters are recycled as a source of processing water, lost by evaporation or discharged. The discharges that are not recycled are controlled by limitations in this draft permit. These discharges may consist of storm water associated with industrial activity which has come in contact with overburden, raw material, intermediate product, finished product, byproduct or waste product; process wastewater which may include water used in the process of washing mined materials, vehicle/equipment washing wastewater and miscellaneous plant cleanup wastewater and mine pit dewatering which may include the above collected discharges along with accumulated groundwater that enters the mine. Treatment usually consists of sedimentation.

The discharge parameters to be limited are pH and total suspended solids (TSS), with Total Petroleum Hydrocarbons (TPH) monitoring from vehicle/equipment washing facilities or from discharges that pass through oil/water separators. Review of DMR data from the last general permit cycle indicates 99% compliance with pH limits, and 96% compliance with TSS limits with no specific water quality problems identified.

The pH limitation is based upon Virginia's water quality standards and federal effluent guidelines (40 CFR Part 436). Stream standards for pH are in most cases the range of 6 to 9 Standard Units (SU); however, there are

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special standards in effect in some areas (only 6.5 to 9.5 SU at present). Special in-stream standards for pH will require adjustment of the pH limitation within the 6 to 9 SU range in order to meet water quality standards and effluent guideline technology requirements. For example, a 6.5 to 9.5 SU special standard will necessitate a 6.5 to 9.0 SU effluent limit.

TSS limitations are based on federal effluent guidelines for some of the industrial categories covered by the draft general permit and on levels which, based on the Department's experience with individual VPDES permits, will protect receiving waters from solids impacts.

TPH monitoring is retained in this reissuance draft only for outfalls from vehicle/equipment washing facilities or discharges that pass through oil/water separators. Review of TPH data from the last permit cycle indicated negligible levels of TPH from commingled wastewater in the mine pits.

The monitoring frequency and sample type have been established after considering the consistency and nature of these operations, the existing analytical data and the potential environmental risk and consequences of the discharges. Reporting of monitoring data is required quarterly.

#### IV. Basis for Proposed Part I Storm Event Monitoring Requirement

Storm water associated with industrial activity that is not combined with process wastewater may be discharged from mining activities covered by this permit. This storm water may have come in contact with or been exposed to overburden, raw material, intermediate product, finished product or byproduct and it may contain sediments eroded from the exposed surfaces of the mine, stockpiles, overburden storage, processing areas, or overburden disposal areas. It is necessary for the protection of water quality in the streams receiving the storm water runoff from a mining operation that appropriate erosion and sedimentation controls and practices be designed and implemented at these facilities. The erosion and sedimentation control practices mandated by the DMM regulations and imposed on the mineral mine through their mining permit include requirements that temporary and permanent control facilities for mining operations be designed to accommodate the rainfall from at least the 50-year and 100-year storm event, respectively, and that control facilities provide for considerable sediment storage (0.125 acre-feet per disturbed acre). The storm event specifications in these requirements exceed the 10-year storm event threshold after which federal effluent guidelines exempt overflows from applicable federal effluent limitations.

The permittees are required to monitor these discharges for pH and TSS once per year over the term of the permit and report the results to the Department. The results of including TPH monitoring in the last permit cycle indicated negligible levels of TPH in storm water discharges and the TPH monitoring requirement has been removed.

#### V. Basis for Proposed Special Conditions:

A. Special Condition No. 1 requires that vehicles and equipment used in the industrial activity are to be operated and maintained in a manner that prevents pollution of surface or ground water. Petroleum products and other fluids are to be stored and handled such that discharge of pollutants to state waters is prevented. The basis for the condition is water quality standards.

B. Special Condition No. 2 prohibits sewage discharges to surface waters under this general permit. Any sewage discharges would require coverage by a separate, individual permit. The basis for the condition is water quality standards and federal secondary sewage treatment standards.

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C. Special Condition No. 3 prohibits the discharge of chemical additives other than those identified in the registration statement and approved at the time coverage is granted under the general permit. The basis for the condition is water quality standards.

D. Special Condition No. 4 requires that the permittee submit a new registration statement if the DMM mining permit is modified or renewed in any way that would affect the location or characteristics of any discharge covered by the general permit. Any changes to the mining facility that could impact discharge quality require additional review before coverage under the general permit is continued. The basis for the condition is water quality standards.

E. Special Condition No. 5 is a requirement for notification of discharges of any unlimited toxic pollutants. The basis for the condition is 40 CFR 122.42(a) and 9 VAC 25-31-200 A.

F. Special Condition No. 6 is an EPA industrial reopener that addresses federal promulgation of more stringent effluent standards or limitations pertaining to this industry. The basis is 40 CFR 122.44(c) and 9 VAC 25-31-220 C.

G. Special Condition No. 7 requires that all materials, products and wastes be handled and stored or disposed of such that discharge of pollutants to state waters is prevented. The basis for the condition is water quality standards.

H. Special Condition No. 8 prohibits the discharge of process wastewater pollutants from co-located asphalt operations. The basis is 40 CFR Part 443.

It is believed that the above effluent limitations and special conditions will maintain State water quality standards.

### VI. Basis for Proposed Requirements for Storm Water Management

Storm water management is required to reduce the potential for pollutants to reach state waters via storm water discharges. Storm water management requirements in Part II are generally current with storm water management requirements in the General Permit for Discharges of Storm Water Associated with Industrial Activity, while taking into account the characteristics of the industry to be regulated under this general permit.

Management of storm water is to be achieved through the development of a storm water pollution prevention plan. The plan is intended to identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges and will describe and ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges. The pollution prevention plan requirement maintains the flexibility for a site-specific plan to be developed and implemented but identifies specific components that the plan must address. These components include the formation of a pollution prevention team, a description of pollutant sources, identification and implementation of measures and controls and a comprehensive site compliance evaluation.

An annual comprehensive site evaluation for all facilities is required in order to allow for the identification of areas contributing to a storm water discharge associated with industrial activity and the evaluation of whether measures to reduce pollutant loadings identified in the storm water pollution prevention plan are adequate and properly implemented in accordance with the terms of the permit, or whether additional control measures are

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needed. Quarterly inspections, including visual examination of storm water discharges, are required to identify sources of pollution and to evaluate whether the pollution prevention measures are being effectively implemented. The inspections are considered a means of determining compliance with permit conditions without requiring extensive sampling programs. The permittee is required to maintain records summarizing the results of inspections and a certification that the facility is in compliance with the permit.

#### VII. Administrative:

The general permit will have a fixed term of five (5) years. Every authorization to discharge under this general permit will expire at the same time and all authorizations to discharge will be renewed on the same date.

All persons desiring to be covered by this general permit must register with the Department by filing a registration statement and applicable fees. Nonmetallic mineral mining facilities that are discharging on the effective date of this general permit and which have not been covered under the previous general permit or an individual VPDES permit are required to submit the registration statement. Existing operations covered under an individual VPDES permit that wish to seek coverage under the general permit must file a registration statement at least 180 days prior to the expiration date of the individual VPDES permit. Existing operations covered under the previous general permit seeking to retain coverage under the reissued general permit must file a new registration in accordance with the existing general permit requirements. For all new facilities that will begin activities after the effective date of this permit, the registration statement must be filed at least 30 days prior to the commencement of operation.

This general permit does not cover activities or discharges covered by an individual VPDES permit until the individual permit has expired or has been revoked. Any person conducting an activity covered by an individual permit which could be covered by this general permit may request that the individual permit be terminated and register for coverage under this general permit. Antibacksliding will be considered prior to granting coverage under this general permit. Any owner or operator not wishing to be covered or limited by this general permit may make application for an individual VPDES permit in accordance with VPDES procedures.

This general permit does not apply to any new or increased discharge that will result in significant effects to the receiving waters, in accordance with the State Water Control Board's Antidegradation Policy contained in the Virginia Water Quality Standards (9 VAC 25-260-5 et seq.).

All facilities that the Department believes are eligible for coverage under this general permit will be authorized to discharge under the terms and conditions of the permit after a complete registration statement is submitted, the applicable permit fee is paid and the Department sends a copy of the general permit to the applicant. If this general permit is inappropriate, the applicant will be so notified and the requirement that an individual permit or alternate general permit is needed will remain in effect.